

January 13, 2000
**AIR POLLUTION CONTROL ADVISORY COUNCIL
(APCAC)**

Member Attendees: Chairman Mitchell Leu, Brad Black, Cliff Cox, Dean Johnson, Diane Lorentzen, Mike Machler.

Other Attendees: Bob Raisch and Charles Homer.

Speakers: Bob Martin, Deb Wolfe, Frank Prescar, Joan Bowsher, Dan Rapkoch, Tom Ellerhof, John Constan, John Podolinsky, Brad Black, Elton Erp.

Meeting began at 2:05 PM in Room 225 of the Scott Hart Building of the Capitol Complex in Helena, Montana.

1. **Introductory Remarks. Mitchell Leu** welcomed all present. Absent were Dave Noell and Dennis Alexander.
2. **Review of November 3, 1999 Minutes.** Dean Johnson moved and Brad Black seconded the acceptance of the minutes. Motion carried.
3. **Housekeeping Remarks. Bob Habeck.**
 - a) Edward Peretti and Sandra Fischer have resigned from the Air Pollution Control Advisory Council. Mr. Habeck said with the chairman's permission he would compile a list of possible replacements and if possible suggest them to the council at the next meeting. Then the names would be run by Mr. Simonich before being sent to the Governor. He requested suggestions from the council on possible members that would fit both the geographical distribution pattern and the segment of the population represented (Mr. Peretti is a veterinarian and Ms. Fischer an urban planner).
 - b) Mr. Habeck gave to the council members a copy of the law that authorizes the council. He pointed out that members serve at the pleasure of the Governor and there are no designated terms. Mr. Habeck mentioned that if a member's interest wanes or it becomes difficult to make the meetings, it is probably best to resign as Mr. Peretti and Ms. Fisher have done. However, it is to the council's advantage to have veteran members to carry over the knowledge base. Mr. Habeck said this is also a good time to step back and ask council members how they would like their council to operate. As an advisory council, members advise the department on what action they would like the department to take. Mr. Habeck said from a presenter's point of view he would appreciate knowing how the APCAC members stood on subjects presented—some way to determine the consensus of the group.
 - c) Mr. Leu asked for volunteers for chairman of the council for the coming year. Diane Lorenzen did so. Mr. Johnson moved that Ms. Lorenzen be elected chairperson and Mr. Cox seconded it. Motion carried and Mr. Leu turned over the meeting to the new chairperson.
 - d) The July date for the council meeting was changed to June 28.
4. **Rulemaking Action Items.**
 - a) **Revised Definition of VOC. Bob Martin.**

The department is requesting the Board initiate rulemaking to amend the air quality rules to revise the definition of volatile organic compounds (VOC) to add t-butyl acetate (also known as tertiary butyl acetate) to the list of compounds excluded from the definition. The comparable federal definition of VOC, in 40 CFR 51.100, was recently revised, and this action is to update the state definition to be the same as the federal. The Environmental Protection Agency (EPA) revised the federal definition because t-butyl acetate has been determined to have negligible contribution to tropospheric ozone formation. EPA is basing its exclusion of t-butyl acetate from the definition of VOC on information in a petition submitted by Lyondell Chemical Co., which plans to manufacture t-butyl acetate. This affects industries that manufacture paints, varnishes, lacquers, enamels, and allied products.

b) IBR-Portland Cement/Primary Lead Smelting MACTS. Bob Martin.

The department is requesting the Board initiate rulemaking to amend the air quality rules to incorporate, by reference, the federal Portland Cement Manufacturing Industry and Primary Lead Smelting maximum achievable control technology (MACT) standards. MACT is a regulation that targets a specific industry and a specific pollutant. A MACT commonly requires the industry to achieve certain pollutant emission control efficiency. The MACT standards are source category-specific emission and control equipment standards for sources that emit hazardous air pollutants.

It is necessary for the state to adopt these MACT standards to obtain delegation of authority from EPA to enforce the air toxics program. This action is necessary to maintain state primacy in the administration of the federal MACT standards. These two MACTS affect ASARCO in East Helena, Ash Grove Cement Co. in Montana City, and the Holnam Inc., Trident Plant in Three Forks.

Equipment standards for the portland cement plants are: Method 320 for the measurement of vapor phase organic and inorganic emissions by extractive Fourier Transform Infrared (FTIR) spectroscopy and Method 321 for the measurement of gaseous hydrogen chloride emissions from portland cement kilns by FTIR spectroscopy. Specific pollutants are: acetaldehyde, arsenic, benzene, cadmium, chromium, chlorobenzene, dibenzofurans, formaldehyde, hexane, hydrogen, chloride, lead, manganese, mercury, naphthalene, nickel and phenol.

c) Credible Evidence Rule Update. Deb Wolfe.

Currently, in order to show whether or not a facility is in compliance, the results of a certain reference test is used. Credible evidence would say that data collected from other sources could also be used to show compliance or noncompliance. Industry objected saying the primacy of the reference test would be compromised. They felt there was a liability risk. Ms. Wolfe said this is a federal rule and we received a State Implementation Plan (SIP) call – a command from the EPA that says this requirement needs to be incorporated into the state rule. The Clean Air Act Advisory Council (CAAAC) group discussed this requirement in October. The environmentalists favored it verbatim, and industry people wished to see the reference test preserved by putting a presumption favoring the reference test in the rule. The department decided the federal text actually does preserve the reference test as a benchmark against which you measure other credible evidence. The department will initiate rulemaking at the January 21 Board of Environmental Review meeting. The SIP call mandated a rule amendment be in place by June 1, 2000. An extension has been requested which would give the department until October of 2000 to get the rule in place. EPA has not responded to the extension request, so the Montana Administrative Register (MAR) has been prepared incorporating the federal language and does not include the industry's suggested options. This leaves industry free to go before the Board themselves.

Mitchell Leu asked what had happened in Utah when they ignored their SIP call. Ms. Wolfe responded that nothing had happened but the Utah department was focusing on education to try to persuade the industries that this rule isn't as bad as it sounds. Ms. Wolfe said this could be a tempest in a teapot being objected to as a matter of principle.

Chuck Homer, DEQ, Permitting and Compliance Division said the method used by the department to take compliance action has been consistent with this federal language. He said in many instances there is not a reference test available at all times. He said he could not foresee this new language causing any problems.

5. Discussion Items

(a) L&C Pollution Control Program –Lead Abatement.

Bob Habeck introduced Frank Prescar, Lewis and Clark City/County Health Department, Environmental Division, Air Quality, and Joan Bowsher, Administrator for the Environmental Health Division of Lewis & Clark County. Mr. Habeck said state and federal dollars have been made available for counties to run and operate their local air quality programs. He said the following two speakers would discuss what the local air control program does and tell about the East Helena Lead

Abatement Program. This regards a pollutant of concern to an industry and will segue back up to Libby, which has another pollutant of concern to an industry.

Frank Prescar spoke on the Lewis and Clark air pollution program. He said their program was initially begun because local physicians in the late 70s were noticing an increase in respiratory illness during the winter months, and asked the health department to check it out. They worked together on education projects and in 1986 a program was implemented. This program deals primarily with residential wood smoke in the Helena Valley. He said they are the only voluntary program in the state. He said to date they have not exceeded any of the standards and in the past two years there have not been any episodes that need enforcement -- partly thanks to windier, drier winters. He said their program is beginning to look at some of the outlying areas of the county -- like Lincoln. He said they are looking at rewriting a portion of the ordinance to deal with burning in the summer months. Their present enforcement season is from November through February, the time of most inversions; but in the past few years the worst air quality days have been in the spring due to open burning and forest service slash burns. He said the program has been well received by the community.

Joan Bowsher spoke on the East Helena Lead Abatement Program. The East Helena lead smelter, ASARCO, has been in operation for over a hundred years and only in the last couple of years has met EPA guidelines for emissions. There has been a history of elevated blood levels in the East Helena community. East Helena has a population of about 2000 but subdivisions are developing rapidly in the surrounding area, as it is becoming a bedroom community for nearby Helena. Many of these new people are young families. East Helena has elevated lead deposits in the soils within about a two and a half mile radius of the smelter and at times beyond that due to flood runoff, wind or relocation of soils. Prickly Pear Creek runs through the smelter site and then through the East Helena community and then out into the valley and has flooded many times in the past 100 years. Prior to remediation the average lead level in the soil was 1,100 parts per million with much higher levels in the area closer to the smelter. EPA models show that when lead levels are 600-700 parts per million there is a 5-12 percent risk that blood will show elevated lead levels in the lab. Up to last year there were 500 residential lots remediated, as well as parks, schools, and lots of open areas. Aerial emissions have been greatly reduced and EPA guidelines for this have been met, except for last summer.

The County Health Department has been active in the East Helena area with the lead issues because they have jurisdiction in both the city and county areas. The residents of East Helena being dependent on the smelter for jobs and school taxes have been resistant to EPA regulatory approaches for fear it will cause the smelter to close. The County Health Department was approached in the early 1990s by EPA and the state health department to see if they could put together a program to protect the citizens of East Helena. This program is part of ASARCO's cleanup requirement. The program was put in place in 1995 after three years of negotiation between the plant, EPA, the state and county. There are county health staff in East Helena now including an environmental specialist that is working with the citizens of East Helena on an extensive education program. There were earlier programs in which the L&C Health Department played a leading role. A large study in 1983 was a door-to-door drawing of blood and gathering of other samples. Studies in 1987 and 1988 weren't as complete as fewer were tested. In 1991 they did central blood drawings. Blood levels have come down because of smelter emissions being down and the highway that used to run down the main street of East Helena has been relocated to the south edge. She said the numbers from 1999 showing blood levels is not complete but they seem to be going up and the department is not sure why -- perhaps people are getting more relaxed and possibly those coming in for testing are from more high risk areas and with more high risk children. Their program focuses on the highest risk children (nine months to three years of age) and then going up to seven years.

Lead causes developmental problems, especially in the nervous system. The city of East Helena and their school district have been asked if they would like a study to determine if there are learning disabilities or behaviors that could be correlated with lead. The local school district has turned all these offers down, as they are hesitant to stigmatize their source of livelihood.

In the early 1990s ASARCO started the remediation of yards. One reason they were motivated to negotiate on the L&C Health program was to reduce the number of yards to be remediated to something more cost effective. Now yards have to test higher than 1,000 parts per million and have a child under seven or a pregnant woman living in that home to qualify. There are about 200 yards still eligible, and areas not-yet-tested that could be eligible. The program is a well-accepted community based program. Education is the main focus and screening is available at all times through the public health clinics in Helena and special clinics in East Helena. All kinds of gimmicks are employed to get families with small children in for screening. If there are elevated blood levels in a child, they are offered an environmental assessment of their home to try to see why the blood level of their child is elevated. All the babies are traced with a new baby program. Other activities employed to reduce lead levels are: a repository for removed elevated soils east of the smelter to prevent these soils from being transported through the town, dust control measures where the roads have a tough overlay, being sure yards have a good ground cover, and all garden spots are replaced with new soil. There is also EPA money available for the abatement of exterior lead based paint.

Ms. Bowsher said the programs are well accepted because they look at the bigger picture and try to work with the community. Elevated blood levels are very serious but the closure of the smelter would also have serious consequences for the community.

Mr. Leu asked about medical studies done in the late 1960s. Mr. Leu said he grew up in the East Helena community and at that time sulfur dioxide was more a problem than the lead. He said he was tested but didn't hear back. Ms. Bowsher said they didn't have any records of these studies. Concerning a question about the Montana Lead Program she said it is now a centralized program and the money is funneled through the county health departments.

Mr. Cox asked if they track anything besides the level of lead in the children, like respiratory problems. Ms. Bowsher said not as far as she knew. She said the East Helena community is fairly reticent as the residents don't want the company to look bad. The community is changing as more people move in that don't have strong ties to ASARCO and there is more openness to asking questions.

Ms. Bowsher said they were trying to negotiate and finalize the final Record of Description which would be a step toward closing EPA's role in East Helena, but that has been put back on the shelf due to new arsenic concerns.

(b) Libby Asbestos – Introduction/DEQ's Role. Dan Rapkoch, Communication Manager for DEQ.

Mr. Rapkoch said in September the department placed an ad in Libby area newspapers concerning the release of approximately \$67,000 in bonds remaining in the W.R. Grace (now Kootenai) reclamation fund. The local community requested a public hearing. News stories had been and were being published concerning the health issues that exist in this area. Copies of the initial stories by Andy Snyder of the Seattle Post were passed to members (exhibit 1 of the minutes) Exhibit 2 is another information sheet passed to members by Mr. Rapkoch. On December 1, a public meeting was held not only to address the release of the bond but also to give people an opportunity to explain health problems in the Libby area. DEQ Director Mark Simonich, Mr. Rapkoch and several members of the Environmental Management Bureau attended the meeting. Since this meeting the department has been looking at the issues such as further reclamation of the mine site and health issues. The EPA has put a team of investigators in the area to run environmental tests. DEQ has been asked to take a lead role in disseminating information on the Libby situation and Mr. Rapkoch is in charge of seeing this is done. He will do information updates that will be provided in a number of formats – hard copies or e-mail.

(c) Libby Asbestos – Extent of Contamination. John Constan, Hazardous Waste Site Cleanup Bureau, Remediation Division, DEQ.

Mr. Constan did a Power Point presentation on the extent of contamination in the Libby area and what is known about it. His role is working along side of EPA and making sure the state's concerns are heard by EPA and that the state stays informed on what is happening in the area. Mr. Constan handed out information on the history of the mine site (exhibits 3 and 4). The concern here is not release of

the bond, but community health concerns. He said the concern is with a form of asbestos called tremolite. They are checking mine wastes, homes that have vermiculite insulation, vermiculite used in the gardens to help grow plants, ball fields next to piles of vermiculite, a creek that runs through the impoundment area, the export plant, and similar areas. A private plant nursery occupying a tunnel once used for exporting the vermiculite is being used to grow mushrooms in buckets of vermiculite. He said the community has many health concerns – including what is the current exposure. He said the EPA has sampled forty homes- air, dust, wipes, and gardens. Future plans include a home questionnaire – including past work history at the mine – and a major health screening effort. There are air monitoring devices that will be used. Results of tests on samples collected will be back by the end of the month and they will be evaluated to decide what further actions need to be taken.

In response to a question from Mr. Cox, Mr. Constan said the attitude of the residents has been good. Dr. Black added that the people are not angry but concerned. They don't want to raise a stink but they are worried. Workers have good feelings about their working past and feel a bit guilty, but the sick and dying, and families left, need to get the help they need. He said there are people who want their homes sampled and some that don't.

Tom Ellerhoff, DEQ Director's Office.

Mr. Ellerhoff said he was a coordinator of Libby information. He said if anyone has a question about Libby and calls DEQ the chances are they'd be referred to him.

(d) Libby Asbestos – Local Health Effects. Brad Black, APCAC Member and Libby Physician.

He said the asbestos of concern here is trimolite. Trimolite is everywhere but the danger lies in its 30 percent concentration in this area. Trimolite is a very rigid, long, needlelike crystal and is a by-product in the mining of vermiculite. The trimolite particles penetrate the pleura (lung lining) and do not leave. The body has a cleaning mechanism that eliminates most foreign particles that invade the lungs, but the phagocytes (warrior body cells) are frustrated because the trimolite is too long for them to engulf. Irritation sets in as the phagocyte discharges inflammatory chemicals to try to get its job done. This triggers a reaction in the cell growth of the area and a thickening of the lining results which hampers breathing overtime. This is ongoing and so the latency factor could be as long as twenty years.

Mr. Black said they need to have a health screening process to determine the extent of the past exposure. Not only the workers and families of workers, but also others that just delivered to the area are showing symptoms of the disease. We need to determine if trimolite exposure is still going on – people need to be reassured. He said it is important to figure out the most productive way to do a health screening and he said they are working on it in a combined fashion. Mr. Black said he'd be surprised to see anything in the fresh sampling except at the nursery site, but if it were in the homes that would be another issue. He said he felt the highest risk medically is before 1980 and maybe 1975 as the expansion plant closed in 1975 and all the ore was shipped out. Mr. Black said there would need to be strategies to reduce exposure and in screening – who lived where and when. He said the only way to look at the exposure is through the people. He said there are 300 people right now with problems and the concern is that it will rise. Mr. Black said they'd like to see an infrastructure to take care of these people – to do a complete screening and then a follow-up of help for those who need it and this will be fairly expensive.

In response to a question about cancer, Mr. Black said growth stimulators released in the irritation could stimulate cancerous growth. He said there are thirteen with a rare cancerous tumor now in Libby.

(e) Libby Asbestos – Elton Erp, Monitoring and Data Management Bureau, PPAD, DEQ.

The department switched from the conventional manual filter based particulate monitoring in 1993 to a continuous monitoring. Due to a space problem, these records were given a retention policy of five years and so the department disposed of all filters from before 1994. But, Mr. Erp said PM2.5 has been collected since the beginning of 1999 and the collection area is in the middle of downtown Libby. The samplers are high tech with very precise volumetric control. They handle one cubic meter in an hour or a total of 24 cubic meters a day. Mr. Erp said this data promises to produce a very sensitive

assay with very low detection limit. Are they assayable for asbestos? He said Dr. Podlinsky was in contact with a lab in the twin cities and they said it would. For a fee the labs would assay as many of them as are wanted. So we do have assayable filters for the entire year of 1999 at three day intervals. So if the question you want to answer is where is the concentration of asbestos fibers in the ambient air? What is your average citizen breathing on the streets? Mr. Erp said you would be hard put to find a better set of samples. He said his objective for being at the council meeting today is to say we have the samples available to anyone who wants to ask the question.

Mr. Rapkoch responded to a question that EPA has been informed of the availability of these samples if they want them analyzed.

(f) Libby Asbestos – John Podolinsky, Air and Waste Management Bureau, Permitting and Compliance Division, DEQ.

Mr. Podolinsky said there isn't an ambient air standard for asbestos. He said there is a lot of history on asbestos exposure and documentation of people dying from some form of lung ailment, but only recently have we been able to say that this is caused by some type of asbestos. The regulations we administer in our asbestos control program are built upon studies done by NIOSH and OSHA and EPA. As a result, the department has fairly rigid standards that deal with asbestos in buildings and exterior of buildings but there is no ambient air standard. Mr. Podlinsky said this could be because asbestos is ubiquitous in the environment, higher in some environments than others, but naturally occurring. Regulating things caused by humans as opposed to things caused by nature is easier and is probably why there isn't an ambient air standard.

Dr. Black said it would be difficult to come up with a number. We could autopsy every body to determine their fiber load when they died. There are a lot of factors involved – some die within two months and others have worked twenty years with no disease. No one understands – it obviously has to do with the structure of the body and how the body reacts. He said it is known that there is a linear relationship between fiber content and disease. More knowledge is needed. He said this impacts 30 to 40 percent of the people of the Libby community.

Mr. Erp suggested that if the numbers are low after tests are run, people could be comfortable there isn't a problem. If they are high they might want to pack up and get out of town. An individual needs to decide for himself if the numbers are in the median range. When it comes to carcinogens, he said, researchers have not agreed on a safe threshold. Mr. Rapkoch agreed that the people should have a number as to the extent they are being exposed to harmful asbestos.

Mr. Black added that unless something comes up in the ambient air testing, the screening should be of people before 1980/85 – the high-risk people. It was pointed out that there has been influx and outflux of people so the total number possibly affected is hard to tell.

6. Confirm next meeting date. March 9, 2000.

Mike Mahler moved that the meeting adjourn. It was seconded and the meeting adjourned at 5 PM.